We claim:

- A process for the preparation of tetrasubstituted ureas by reaction of the corresponding amines with phosgene in the presence of an aqueous inorganic base at a temperature in the range from 0 to 150°C, which comprises
- feeding the corresponding amine, the phosgene and the aqueous inorganic base on average continuously to the reaction apparatus,

forming a two-phase system in the reaction apparatus through the choice of the tetrasubstituted ureas to be prepared,

through the mixing ratios of the substances and substance mixtures to be fed in, through the temperature during the reaction and, where appropriate, through the feed of an organic solvent which is not completely miscible with water, and

20

discharging the reaction mixture on average continuously from the reaction apparatus.

- A process as claimed in claim 1, wherein the tetrasubstituted
   ureas to be prepared have a solubility in water of ≤ 10 g/l of water, measured at 25°C and atmospheric pressure.
- A process as claimed in either of claims 1 and 2, wherein the tetrasubstituted ureas to be prepared have a melting point of ≤ 150°C.
- 4. A process as claimed in any one of claims 1 to 3, wherein the aqueous inorganic base employed is an aqueous inorganic base which has a lower pK<sub>b</sub> value, measured at 25°C in aqueous solution, than the corresponding amine.
  - 5. A process as claimed in any one of claims 1 to 4, wherein the aqueous inorganic base employed is aqueous sodium hydroxide solution and/or potassium hydroxide solution.

40

- 6. A process as claimed in any one of claims 1 to 5, wherein the reaction is carried out at a pressure in the range from 0.05 to 1.0 MPa.
- **5** 7. A process as claimed in any one of claims 1 to 6, wherein the reaction is carried out in a stirred-tank reactor.
- A process as claimed in any one of claims 1 to 7, wherein the reaction is carried out in a cascade of at least two
   stirred-tank reactors.
- A process as claimed in either of claims 7 and 8, wherein part of the reaction mixture is discharged from the region close to the liquid surface and a further part is discharged from the region close to the bottom of the stirred-tank reactor.
- 10. A process as claimed in any one of claims 1 to 9, wherein the tetrasubstituted ureas prepared are N,N,N',N'-tetrabutylurea,
  20 N,N'-dimethylethyleneurea and/or N,N'-dimethylpropyleneurea.

25

30

35

40